

**CLAIMS**

1           1.    A mobile terminal, comprising:  
2           a processor;  
3           a memory;  
4           transceiver circuitry;  
5           an internal bus coupled to the memory, to the  
6           transceiver circuitry and to the processor; and  
7           wherein the memory includes computer instructions  
8           that define operational logic of the mobile terminal to  
9           enable the mobile terminal to remove IP packet header  
10          information of a plurality of data packets and to  
11          construct an SMS message.

1           2.    The mobile terminal of claim 1 further  
2           including computer instructions that define operational  
3           logic to enable the mobile terminal to process the  
4           constructed SMS message.

1           3.    The mobile terminal of claim 1 further  
2           including an audio processing circuit for generating  
3           audio to be played over a speaker, which audio signals  
4           were received as a digital signal by the mobile terminal.

1           4.    The mobile terminal of claim 1 further  
2 including a speaker coupled to receive an analog signal  
3 from the audio processing circuit wherein the speaker  
4 creates audio for human perception.

1           5.    The mobile terminal of claim 1 further  
2 including a microphone for converting sound into  
3 electrical signals, which electrical signals are  
4 transmitted to the audio processor.

1           6.    A mobile terminal, comprising:  
2           transceiver circuitry for receiving communication  
3 signals over a wireless communication link; and  
4           SMS message processing circuitry for reconstructing  
5 and processing SMS messages transmitted in a data packet  
6 format, the processing circuitry being coupled to receive  
7 data packets from the transceiver circuitry.

1           7.    The mobile terminal of claim 6 further  
2 comprising legacy SMS message processing circuitry  
3 wherein the mobile terminal is coupled to receive SMS  
4 messages in both data packet and in legacy SMS message  
5 formats.

1           8.    The mobile terminal of claim 6 further  
2 comprising audio processing circuitry coupled to receive  
3 communication signals from the transceiver circuitry.

1           9.    The mobile terminal of claim 8 further  
2 comprising a speaker coupled to the audio processing  
3 circuitry for producing sound.

1           10. The mobile terminal of claim 8 further  
2 comprising a microphone for receiving sound waves and for  
3 converting the received sound waves into electrical

1 signals that are to produced to the audio processor for  
2 processing.

1 11. A method in a GPRS capable mobile terminal for  
2 receiving an SMS message, comprising:

3 receiving a plurality of data packets;

4 determining that the plurality of data packets form  
5 an SMS message;

6 removing packet header information;

7 reforming an SMS message; and

8 processing the SMS message by SMS processing  
9 circuitry within the mobile terminal.

1 12. The method of claim 11 further including the  
2 step of receiving an SMS message in a legacy format and  
3 then processing the SMS message by the SMS processing  
4 circuitry within the mobile terminal.

1 13. The method of claim 11 further including the  
2 step of transmitting an SMS message from the mobile  
3 terminal to a base station in a data packet format.

1 14. The method of claim 13 further including the  
2 step of converting an SMS message into a plurality of  
3 data packets.

1           15. The method of claim 14 further including the  
2 step of inserting an IP address of a message center  
3 within a header of each of the data packets.